



# Plant Chat

A Quarterly Publication from the Bismarck Plant Materials Center  
to the NRCS Field Offices in North Dakota, South Dakota, and Minnesota

Summer 2005

Volume 5, Issue 3

<http://Plant-Materials.nrcs.usda.gov>

## Mowing Native Seedlings to Control Weeds

Weed control in new seedlings is critical for successful establishment. Increased species diversity in native seedlings, especially forbs and legumes, limits weed control options with herbicides. Mowing is the most widely used weed control method. There are critical procedures that will improve weed control and lessen degree of injury to the seeded species.

### • Mowing Height –

Eight to ten inches is the preferred stubble height. This will be above most 1 to 2-year old forb and legumes species in early summer. Certain species are especially sensitive to clipping height; removal of the basal leaves may result in death of the plant. Some grass species such as switchgrass have high growing points, and once established should not be mowed at a height less than 10 inches until after the growing season.



### • Equipment –

Swathers generally work best because of operator visibility, maneuverability, and ease of height adjustment. The operator can quickly raise or lower the platform. Windrows that are heavy enough to smother new seedlings should be promptly removed. Sickle bar mowers are good if an adequate, consistent stubble height can be maintained. Rotary mowers can work well if they are set at the highest wheel setting. This will usually result in about an 8-inch clipping height. A level mowing height should be maintained and travel speed as appropriate to disperse the clippings. A sharp blade is essential.

### • Timing –

Mowing must be done early enough in the season before most of the weed seed become viable. The seeded species can still benefit from the “opened canopy” and put on new growth before fall. Multiple mowings in a season may be necessary with high density/biomass weed competition. Mowing in late summer or early fall provides little benefit to the seeded species and probably causes more harm than good. Check local/state regulations of individual conservation practices for the earliest allowable mowing dates.

Whenever new seedlings are mowed, some injury occurs to the seeded species. Young forb and legume seedlings are especially vulnerable and may be killed by driving over them. If weeds are a competition problem to the new seeding, then mowing is probably justified. Spot mowing is encouraged whenever possible. This eliminates damage to the seeded species in areas where you don't have to mow, and maintains the taller wildlife cover. Spot mowing also creates “edge” structure which enhances landscape diversity within the field and may provide additional wildlife benefits.

*Dwight Tober, Plant Materials Specialist*

## Stiff Sunflower—Plant Profile

Have you considered using stiff sunflower as part of the forb component of your native plantings? Stiff sunflower is a native perennial forb that is strongly rhizomatous and often forms dense colonies. Stiff sunflower is drought tolerant and grows on many different soils, but is found primarily on upland range sites such as loamy, shallow and thin loamy; and less frequently on lowlands such as limy subirrigated.

This native perennial forb is the most prevalent sunflower in the mixed grass prairies. The forage is readily eaten by livestock and wildlife and actually declines with continuous grazing. The seed also provides an important wildlife food source as well.

Seed supplies of stiff sunflower have been limited in the past and have traditionally demanded a fairly high price per pound. Due to the increased conservation need for native forb species and the positive conservation benefits that the stiff sunflower offers, the Bismarck PMC released a selected class called Bismarck Germplasm Stiff Sunflower in 2000. The Bismarck PMC maintains the foundation equivalent seed source and makes it available to producers interested in growing it for commercial increase. Limited commercial seed is available. When planning your next native mix include a small percentage of stiff sunflower. The diversity and plant attributes it offers will add to the conservation value of your planting.

*Wayne Duckwitz, PMC Manager*



*Stiff sunflower*



"The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer."